EXAMINER'S AMENDMENT

In this Examiner amendment a <u>complete Examiner amendment is presented with respect to the Amendment After Final dated 06/10/2008</u>, where some minor typos are fixed from the previous Office action, basically changing the word "block" to "blocks" in claims 1, 19, 30 and 33; and chip to "chips" in claim 6.

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Raymond Berdie on 7/11/2008.

The application has been amended as follows:

a) in claim 1 line 3 the recitation "blocks of symbols to form the frames" is changed to "blocks of information bearing symbols to form frames"

b) in claim 1 line 4 the recitation "blocks of symbols" is changed to "blocks of information bearing symbols"

c) in claim 1 line 6 the recitation "interleaved frames" is changed to "stream of frames"

d) in claim 1 line 6 the recitation "the chips" is changed to "chips"

e) in claim 5 line 4 the recitation "the communication channel" is changed to "a communication channel"

f) in claim 6 line 1 the recitation "the guard chips" is changed to "the L guard chips"

g) in claim 7 line 1 the recitation "the transmission signal by" is changed to "the UWB transmission signal comprises"

h) in claim 11 line 3 the recitation "N_c chips" is changed to "N_c chips, wherein N_f and N_c are integers"

i) in claim 14 line 2 the recitation "the signal" is changed to "the UWB transmission signal"

j) in claim 15 line 3 the recitation "the signal" is changed to "the UWB transmission signal"

k) in claim 19 lines 3-4 the recitation "blocks of symbols" is changed to "blocks of information bearing symbols"

l) in claim 19 line 6 the recitation "interleaved frames" is changed to "stream of frames"

m) in claim 19 line 9 the recitation "stream of interleaved chips" is changed to "stream of chips"

n) in claim 23 lines 3-4 the recitation "the communication channel" is changed to "a communication channel"

o) in claim 30 line 5 the recitation "the frames for the" is changed to "frames for"

p) in claim 30 line 7 the recitation "blocks of symbols" is changed to "blocks of information bearing symbols"

q) in claim 30 line 9 the recitation "the chips" is changed to "chips"

r) in claim 33 line 4 the recitation "blocks of symbols" is changed to "blocks of information bearing symbols"

s) in claim 33 line 5 the recitation "blocks of symbols to form the frames" is changed to "blocks of information bearing symbols to form frames"

t) in claim 33 line 7 the recitation "interleaved frames" is changed to "stream of frames"

u) in claim 33 line 7 the recitation "the chips" is changed to "chips"

Allowable Subject Matter

Claims 1, 3, 5-19, 21, 23-27, 29, 30, 32 and 33 (renumbered 1-27) are allowed.

The following is an examiner's statement of reasons for allowance: claims 1, 3, 5-19, 21, 23-27, 29, 30, 32 and 33 (renumbered 1-27) are allowed because a comprehensive search of prior art failed to teach, either alone or in combination, generating a stream of frames from blocks of information bearing symbols by applying an orthogonal set of spreading codes to the blocks of symbols to form the frames and interleaving the frames corresponding to different blocks of symbols to form the stream of frames, generating a stream of chips from the stream of frames applying an orthogonal set of time-hopping spreading codes to the interleaved frames to form the chips and interleaving the chips corresponding to different frames to form the stream of chips, and outputting an ultra wideband (UWB) transmission signal from the stream of chips, as the applicant has claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on

Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to JUAN A. TORRES whose telephone number is

(571)272-3119. The examiner can normally be reached on 8-6 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Mohammad Ghayour can be reached on 571-272-3021. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Juan Alberto Torres
7/11/2008

/Juan A Torres/
Examiner, Art Unit 2611